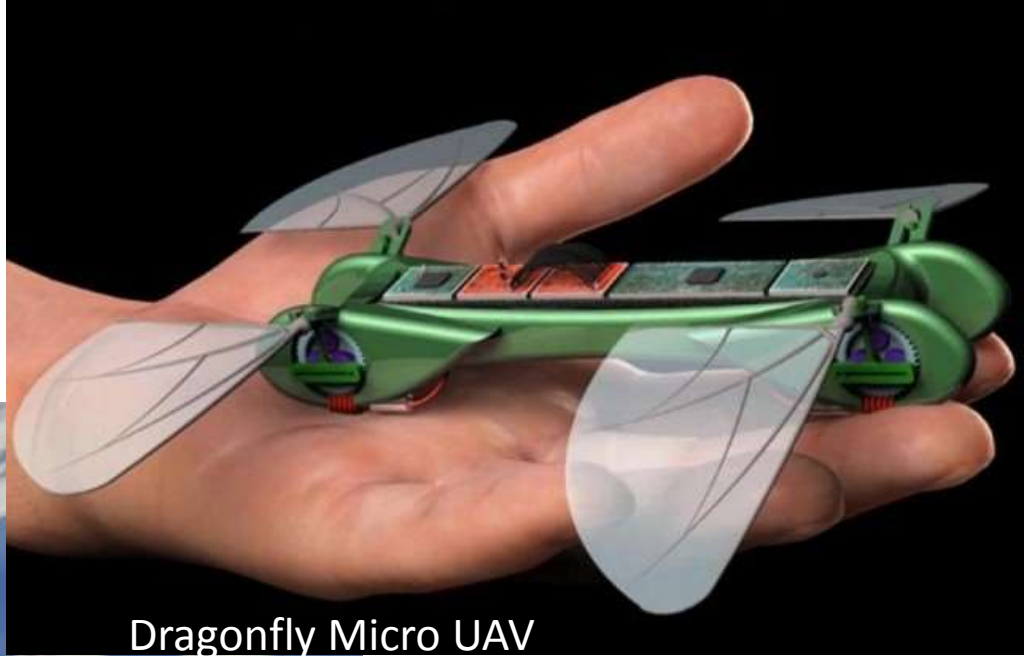


Managing the Challenges of UAS Integration – at Airports

Roy Fuhrmann

Vice President Management & Operations
Metropolitan Airports Commission – MSP





Dragonfly Micro UAV



XGL – XLDron Global Versatile Unmanned Aircraft





What will the future look like?





By 2035, the number of unmanned aerial vehicle operations per year will surpass that of manned aircraft. (US DOT Volpe Center)



Airport Operations

- Notification Procedures
- Communication with Stakeholders – NOTAMS
- Communication with Users – I FLY SAFE
- Local Ordinances and Laws
- Airspace Control
- Towered vs. Non-towered airports
- Segregation of manned and unmanned aircraft operations
- Airspace Congestion and Spacing
- Corridors
- Altitudes
- Day vs. Night
- Lost Communication – loiter points, and return to launch
- Training for ATC, Pilots, UAS Operators





UAS Master Planning



- Airport Facilities and Infrastructure
- Runway considerations and opportunities
- Taxiway
- Ramp and hangar accommodations
- Launch and Recovery Considerations
- Vehicle assisted and mobile control stations
- Airport incursions
- Communication towers for line of sight and beyond
- Obstruction clearances
- Airport Rescue and Fire Fighting (ARFF)



Airport Safety and Security

- Training for Pilots, Operators, Air Traffic Controllers (ATC), Support personnel
- On airport uses
- Investigation of Incidents
- Enforcement
- Law Enforcement – Training and Partnerships
- Privacy





Roy Fuhrmann

Vice President of Management and Operations

Metropolitan Airports Commission

Minneapolis- St. Paul International Airport

612-726-8134

Roy.Fuhrmann@mspmac.org

MetroAirports.org

Stay In Touch with MSP

www.mspairport.com

www.shopsatmsp.com

www.youtube.com/user/shopsatmsp

www.metroairports.org



On Facebook and Twitter:

www.facebook.com/mspairport

www.twitter.com/mspairport



Mobile app, *goHow Airport*

www.ionosplatform.com/mobile

